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20 September 1983

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 287

FBIS FOREIGN BROADCAST INFORMATION SERVICE

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POLICY PLANNING BODY TO BE ESTABLISHED FOR BROADCASTING

Sydney THE AUSTRALIAN in English 28 Jul 83 p 1

[Text]

THE Australian Broadcasting Corporation is to establish a new six-member administrative body costing up to $220,000 a year to advise the ABC board on policy matters.

The ABC will seek applications for the body, the Policy Review and Research Secretariat, in a national advertising campaign starting tomorrow.

The secretariat will be made up of a director and five research officers; the director's salary ranging from $40,000 to $45,000 a year, the officers from $22,000 to $35,000 a year.

A decision to establish the body was reached in principle at a meeting of the ABC board on July 1, and follows a recommendation made in the Dix report on the ABC.

But successful applicants will initially be given only two year appointments.

The Federal Secretary of the ABC Staff Association, Mr Nick Collis-George, last night welcomed the move, but said it should only exist for two years.

"If it helps them make better decisions, then I think its worthwhile," he said. "But it would be an unhealthy thing to have around for too long."

Mr Collis-George also believed the secretariat's cost was cheap for reliable, independent advice.

According to an ABC spokesman, one of the secretariat's duties will be to advise the eight-member board of the corporation on "strategy options".

More specifically, the team will analyse and report on the implications of proposals, papers amd recommendations made to the board, both from within ABC management and other sources.

The director will also be empowered to undertake special research projects, either at the direction of the ABC board or upon his or her own initiative.

The ABC board, which replaces the previous commissioners, is seeking what it describes as highly motivated people to fill the positions: they will be expected to have some expertise in administration, broadcasting policy, cost accounting, technology and law, as well as broadcast engineering, drama, and music.

Applications for the secretariat close on August 17.

CSO: 5500/7593

ABORIGINES SEEK ACCESS TO SATELLITE FOR REMOTE AREAS

Sydney THE SYDNEY MORNING HERALD in English 27 Jul 83 p 14

[Article by Roland Fishman]

[Text]

An Aboriginal media group wants access to the proposed Australian communications satellite so that it can provide television programs to Aborigines living in remote areas of Central Australia.

Members of the Central Australian Aboriginal Media Association (CAAMA) will put their case to the Federal Communications Minister, Mr Duffy, in Canberra today.

The association presents radio programs for Aborigines living in Central Australia, broadcasting on the Alice Springs FM radio station, 8CCC, for 30 hours a week, and for 1½ hours a week on the ABC. It has also supplied about 300 cassettes to Aborigines in 30 communities in Central Australia.

The group employs six people full-time and six part-time. It has received $75,000 from the Federal Government and $45,000 from its contracts with the ABC. It has been operating for 2½ years.

Its director, Miss Freda Glynn, said remote Aboriginal communities in Central Australia would be deluged with white values and images after the satellite was launched.

As a result, white ideology would dominate the wo young Aborigines, who would cease identifying with their background.

The association's administrator and project officer, Mr Phillip Batty, said: "Aboriginal children will identify with role models which are totally alien to their own culture. Their heroes are going to be characters such as the Six Million Dollar Man, rather than their parents and relatives.

"You can imagine what will happen if Aboriginal children start identifying with heroes who don't look like their parents and don't even speak the same language. The kids will cease to identify with their own culture."

Mr Batty said the Aborigines in the outback needed to be provided with information so that they could understand the changes.

This information should be provided in their own language by their own people.

Mr Batty said the association wanted to set up a television production unit which would train Aborigines to produce television programs using Aboriginal language.

It would also like to expand its radio network throughout Central Australia, have greater access to the ABC, and hold a forum in Alice Springs to discuss the implications of the satellite for the Aboriginal community.

The association has already spoken to senior representatives from the ABC, the Australian Film and Television School and the Australian Film Commission.

Mr Batty said: "There is nothing wrong with change, but people have to understand change to be able to deal with it."

About 90 per cent of the people living in the rural areas of Central Australia were Aboriginal.

There were about 20,000 Aborigines living in these areas, many of whom spoke English as a second or third language, Mr Batty said.

CSO: 5500/7593

BRIEFS

TELECOM SPENDING--Telecom Australia will spend more than $25 million on equipment to expand its digital data network during 1984/85, the general manager, Mr Mel Ward, has announced. Introduced in December 1982, the digital data network is the basis of Telecom's digital data service which provides leased-line high-performance data communication services. Telecom said about 1,000 inter-capital terminations are in service and this is expected to rise to 8,000 by June 1984. Mr Ward said that equipment essential for the network was to be provided by three Australian companies at a total cost of $17.9 million. Amalgamated Wireless (Australia) Ltd, would provide about $16 million worth of current generation equipment and GEC Australia Ltd and L M Ericsson Pty Ltd would provide new generation equipment valued at about $1 million each. [Text] [Sydney THE SYDNEY MORNING HERALD in English 1 Aug 83 p 11]

PAY TV LOBBY--The Australian Broadcasting Corporation wants to run subscription television in Australia, the chairman of the corporation, Mr Ken Myer, said yesterday. Viewers pay a monthly fee for subscription television which is broadcast in the normal way. Subscribers are given a decoder to unscramble the signal which cannot be viewed by non-subscribers. "This new advance in Australian television should be the responsibility of the television organisation in which we all have a share--the ABC," Mr Myer said. Mr Myer said that as well as the subscription service the ABC would provide free programs "which will be of special benefit to Australians in metropolitan, country and remote areas." The ABC will lobby the Federal Government to be chosen to run subscription television. Mr Myer said: "Given appropriate Government support, the board is confident it can initiate and operate this new channel on a nationwide basis better than any other potential operator and that it will be a profitable enterprise." [Text] [Sydney THE SYDNEY MORNING HERALD in English 30 Jul 83 p 5]

AVIATION COMMUNICATIONS--The Federal Government yesterday announced a $31 million satellite project, designed to improve aircraft communications within Australia. The Minister for Aviation, Mr Beazley, said 101 ground stations would be built, and signals from them bounced off the new Aussat domestic satellite, to be launched in 1985. He said this would allow pilots flying over outback areas to talk directly to air traffic controllers at large airports, instead of having to pass messages through regional flight service centres. The total cost of establishing the aviation satellite system will be $31 million over the next five years. Of that, $11 million will be paid

to NEC Australia, a Melbourne-based electronics firm, which will manufacture equipment for the system. The ground stations will be small radar dishes strategically place across Australia. There will also be stations as far offshore as Lord Howe and Norfolk Islands, giving the system a range of 320 kilometres off the east coast. Once the system is working, the Department of Aviation will become the second-biggest user of Aussat, after the Australian Broadcasting Corporation. [Text] [Melbourne THE AGE in English 5 Aug 83 p 13]

CSO: 5500/7593

BRIEFS

RRI CONSIDERS 24-HOUR SCHEDULE--Radio Republik Indonesia [RRI] personnel in the capital as well as in the provinces are prepared to conduct a 24-hour broadcast if ordered to do so. Speaking to newsmen at the Jakarta Television Building in Jakarta today, director general of radio, television, and film, Subrata, said that the idea of conducting a 24-hour broadcast schedule had originated from all RRI personnel. He said that at present, RRI had 49 broadcast stations supported by 300 transmitters with a combined capacity of 2,851 kilowatts. [Excerpt] [BK291720 Jakarta Domestic Service in Indonesian 1000 GMT 29 Aug 83]

CSO: 5500/4366

BRIEFS

NO NEW RADIO STATIONS PLANNED--The Information Ministry does not have any intention yet of increasing the number of radio stations or to allow commercial stations, Information Minister Datuk Seri Adib Adam said yesterday. In a written reply to Mr Thomas Salang Siden (BN-Julau), he also said that the Government had agreed to the setting up of a commercial television channel. He said a number of offers had been received from the private sector to run the commercial television and the Ministry was now studying the applications. The Ministry, he said, had also not decided when commercial television would be launched as it would depend on the capability of the company chosen. He added that the Ministry would ensure that the type of programme telecast by the commercial station would not be against the laws or norms of the country. However, he added that the commercial station could arrange its own programme. [Text] [Kuala Lumpur NEW STRAITS TIMES in English 4 Aug 83 p 4]

9201
CSO: 5500/4367

COMMUNICATIONS DEFICIENCIES NOTED; IMPROVEMENT URGED

Beijing GUANGMING RIBAO in Chinese 13 May 83 p 3

[Article by Wang Zigang (3760 1311 4854)]

[Excerpt] Since the establishment of New China more than three decades ago, significant progress has been made in China's communications industry. At the end of 1981, the total length of China's postal routes were 4.66 million kilometers; there were 23,900 long-distance telephone circuits, 8,800 telegraph circuits, and 2,179,000 units of local telephone switching equipment. Postal service was available to 99.6 percent of the communes and 96 percent of the production brigades; telephone service was available to 95 percent of the communes and 58 percent of the production brigades. With the development of international activities and increasing amount of foreign trade, China's international communications services also experienced rapid development. In the area of postal service, we have established direct mail exchange with more than 110 countries and regions; in the area of telecommunications, we have established direct telegraph, telephone, telex, and video telegraph circuits with 46 countries and regions, and have participated in the broadcast of television and radio programs with the major countries on all five continents.

But the communications industry in this country is still far behind international standard; it still cannot meet the needs of the nation's economic development.

As pointed out by Comrade Hu Yaobang during the 12th CPC Congress, developing the post and telecommunications industry is one of key strategic issues for economic development during the next 20 years.

We must acknowledge China's current situation, and concentrate our efforts on organizing key scientific research projects, adopting advanced technologies, and carrying out technological reforms, in order to quickly erase the underdeveloped status of China's communications industry. After a certain period of dedicated efforts, we will be able to establish a flexible, modern communications network consisting of cables, microwaves, satellites and optical fibers.

3012
CSO: 5500/4172

REPORT ON BEIJING INTERNATIONAL TELECOMMUNICATIONS BUREAU

Beijing RENMIN RIBAO in Chinese 30 May 83 p 2

[Article by Lu Nan (7627 0589): An Invisible Bridge to The World]

[Text] In the nation's capital, an invisible bridge to the world is under construction--the Beijing International Telecommunications Bureau.

The Beijing International Telecommunications Bureau was built in response to the developing foreign trade and tourism, and the improving friendship with peoples of other countries. The bureau is located in the Zhaoyang district, which has a concentration of embassies, tourist hotels, and foreign-trade offices; it is also at a convenient section between downtown and the Capital Airport.

The Beijing International Telecommunications Bureau has a total area of 22,000 sq m, of which the main equipment room occupies 11,900 sq m, the auxiliary utility room has 1,300 sq m, and the staff dormitories occupy 8,800 sq m. It is the central outlet of China's international communications system. Once the building is completed, the low-speed manual switching operation for international telephone calls will be replaced by direct dialing; also a new international telex service will be available. Direct telephone service will reach more than 10 commercially active countries including Japan, Hong Kong, the United States, West Germany, Italy, France, Canada, Switzerland, and England; international telex service will include the transmission of charts and numerical data, and will reach 26 countries and regions.

The final configuration of the Beijing International Telecommunications Bureau will include 2,000 international telephone circuits, 12,000 international telegraph circuits, and 4,000 domestic long-distance telephone circuits. Initially, there will be 3,000 international telegraph circuits and 400 international telephone switching circuits. Installed in the bureau will be advanced program-controlled electronic switching equipment, which will be connected via microwave to two satellite ground stations in the suburb of Beijing. The telecommunications signals can be transmitted via satellites to every corner of the world.

The Beijing International Telecommunications Bureau is a test case where investment loan money is used for a post and telecommunications project. After

completion of the project, the total investment of 33.25 million yuan will be partially recovered from increased revenues of international telecommunications service.

The Beijing International Telecommunications Bureau was designed by the Beijing Design Institute of the Ministry of Post and Telecommunications; the actual construction was carried out by the 4th Corporation of the Zhongjian [China Construction] No 1 Bureau. At present, preconstruction preparation is under way. Construction will begin during the fourth quarter of this year, and will be completed in 1985. Installation of the telecommunications equipment will take place in 1986; testing and operation wil begin in the first half of 1987.

3012
CSO: 5500/4171

REPORT ON RAILROAD COMMUNICATIONS IN CHINA

Beijing GUANGMING RIBAO in Chinese 13 May 83 p 3

[Article by Lu Xiao (0712 1321)]

[Text] Along the more than 50,000 km of railroads in China, there are numerous train stations, railroad yards and offices all equipped with telephones and telegraphs. They are connected by electric circuits (including overhead wires and underground cables) along the railroads to form a huge railroad communications network. Railroad transportation must rely on communications every minute of the day.

Before a train is allowed on the railroad tracks, the station officer must contact the next station by telephone to obtain permission; he must make sure that the tracks are all clear, and must complete the blocking procedure before starting the train engine. If the train is not stopping at the home station, he must complete the blocking in advance to let the train pass by. This procedure is necessary to ensure safety, and to avoid serious accidents such as collisions and rearending.

Trains traveling on railroads must obey commands from controllers who rely on telephones to transmit commands and listen to station reports. Each controller must coordinate all the trains traveling along railroads extending tens of hundreds of kilometers. The controllers report to railway branch offices and railway bureaus which are under the central command of the Ministry of Railways.

The interstation communications equipment used for commanding train movement consist of start-train telephones and coordination telephones. Telephones unrelated to these functions cannot be connected to the lines; if the lines are broken, they must be repaired with the highest priority.

Over the last decade, significant progress has been made in the development of wireless coordination telephones. Train operators can talk to neighboring stations through wireless telephones; or they can be connected to regular wire coordination telephones through radio transmitters at the stations and directly talk to the controllers. According to statistics, the efficiency of transportation can be increased approximately 7 percent by using wireless coordination telephones. In this country, wireless coordination telephones

have been installed in railroad sections with multiple tracks and automatic blocking.

Other important communications equipment essential to railway transportation include road maintenance telephones, interstation telephones, electric power control telephones, shipping control telephones, water supply and public safety monitoring phones, intrastation telephones, as well as communications equipment for train position forecast and verification by telegraph.

For general communications, there are two-way telephones connecting the Ministry of Railways, the railway bureaus, the branch offices, and the individual stations around the country. They can all call one another by direct dialing, just like intracity telephones.

In order to further develop railroad communications, efforts have been under way in recent years to install underground coaxial cables, to open 300 carrier telephone circuits, to establish data collection systems, and to use electronic computers for data processing. The objective is to increase communications efficiency, improve coordination, speed up train turnover rate and to realize additional cost savings.

3012
CSO: 5500/4172

BRIEFS

GUANZHOU, HONG KONG MICROWAVE RELAY--Guangzhou, 1 Sep (XINHUA)--The microwave relay communication system between Guangzhou and Hong Kong was completed recently. It began tests on 30 August and has set up a temporary television operation. Complete sets of equipment were imported from Japan and the United States. The system has 2,700 channels which can be used for telephone, telegram, ultrafax [dian shi chuan zhen 7193 6018 0278 4176] and radio transmission. Completion of this communication system will greatly improve communication services between various parts of Guangdong and Hong Kong. At the same time, through connections between the Guangzhou communications building and big cities throughout the country, the new system will also facilitate direct telephone communication between these cities and Hong Kong. The communication system was jointly built by the Hong Kong Great Eastern Telegraph Bureau and the Guangdong Provincial Post and Telecommunications Office. At present it is mainly used for telephone communications between Guangdong and Hong Kong. [Text] [OW020221 Beijing XINHUA Domestic Service in Chinese 1223 GMT 1 Sep 83]

EQUIPMENT FROM JAPAN--On 16 April Xiamen signed a contract with the Fujitsu Communications Corp of Japan in Fuzhou to import stored program-controlled telephone switching equipment. In order to improve its communications capability, and to meet the requirements of foreign trade and of the construction of the special economic zone, Xiamen became the second city after Fuzhou in this province to import program-controlled long-distance and local telephone switching system. This equipment will consist of 10,000 FETEX-150 program-controlled digital switching units for local telephone circuits, 300 long-distance circuits (including 250 domestic circuits and 50 international circuits), as well as peripheral equipment and test instrument, maintenance and repair tools, parts and expendable materials. According to the terms of the contract, this equipment will be installed, tested and ready for online operation by January, 1985. [Text] [Fuzhou FUJIAN RIBAO in Chinese 18 Apr 83 p 1] 3012

FUZHOU-HONG KONG TELEPHONE SYSTEM--Fuzhou, 1 September (XINHUA correspondent Shi Zengyao)--A program-control long-distance telephone system connecting Fuzhou and Hong Kong was put into trial operation today. The direct dialing system can handle 10,000 telephones at a time, according to an official of the Fuzhou Telecommunications Bureau. It will also serve other cities in the province, including Xiamen, where a special economic zone is being developed. The facility was imported from Japan. Coastal Fujian, along with neighboring Guangdong Province, has been designated to practise special policies and flexible measures to attract foreign investment. [Text] [OW011142 Beijing XINHUA in English 0823 GMT 1 Sep 83]

WIRED BROADCAST PROPERTY DAMAGE--Dear Comrade Editor: In farm villages, party members and members of communes must rely on the public broadcast system to provide news and programs on scientific education. But there has been a problem which deserves public attention. Some people have cut the broadcast lines and caused interruptions of these programs; others, while building new houses, have taken the liberty of digging up and removing the wire poles without getting prior approval from the broadcasting stations. There is even a saying among some of the commune members: "Power lines have top priority, telephone lines have second priority, and broadcast lines have the lowest priority." In some cases, no sooner were the lines repaired, then someone would cut them again, thus preventing the commune residents from listening to the broadcasts. We call on all members of the commune to please take good care of the wired broadcast lines, and stop voluntarily any action that would damage the lines. For those few who intentionally sabotage the broadcast lines, they must receive the appropriate penalties from authorities in order to ensure uninterrupted operation of the broadcast system. From Jiangnan Commune of Baoshan County, Zhu Zuxiang [2612 4371 7449] [Text] [Shanghai JIEFANG RIBAO in Chinese 20 Jun 83 p 3] 3012

BEIJING TELEPHONE EXCHANGE--Beijing, 21 Aug (XINHUA correspondent Lai Yunchuan) --A new telephone exchange started operation in Beijing today. This is the fourth telephone exchange built in the Chinese capital in the past few years. The initial capacity of the exchange is 4,300 telephones and its ultimate capacity will be 10,000. Beijing has accelerated its telephone installation in recent years. According to statistics of the municipal telephone bureau, the addition of new telephone exchanges and increases in the capacity of existing ones have enabled the city proper to own 115,800 phones in 1982, compared to 82,000 in 1978. But this number still lagged far behind the rapidly growing needs, said a telephone bureau official. Now 14 telephone exchanges are being programmed or under construction in Beijing. They are expected to be completed by 1986 when Beijing will be in possession of 200,000 telephones. According to the overall plan for Beijing's future ratified recently by the Central Committee of the Chinese Communist Party and the State Council, by the year 2000 Beijing will have more than 600,000 telephones in its city proper. By that time, every five households will be able to share a telephone. [Text] [Beijing XINHUA in English 1206 GMT 21 Aug 83 OW]

CSO: 5500/4191

NEW AUTOMATIC TELEPHONE EXCHANGES TO BE INSTALLED

Dhaka THE NEW NATION in English 18 Aug 83 p 2

[Text] JESSORE, Aug. 16: With the introduction of four auto-exchanges the total telephone capacity under Jessore Telegraphs Division will go up to 7000 by the end of the year.

The capacity at present under Jessore Division comprising the entire Jessore and Kushtia districts and Satkhira sub-division of Khulna district are learnt to be about 5000.

The four automatic telephone exchanges now operating under the division are located at Jessore, Kushtia, Noapara and Sarsa with capacity of 3931. Sarsa Auto Exchange is the latest one that has joined also the telecommunication system recently. The four new auto exchanges which are expected to be working by December this year are to be located at Magura and Narail in Jessore and Chuadanga in Kushtia and Satkhira in Khulna districts with 400 capacity for each.

Most of the thanas and upazillas which fall under the jurisdiction of Jessore Division are connected either by Central Battery or Magnetto Systems. The Telegraphs and Telephones Department has been learnt to have chalked out an elaborate scheme to promote all the Magnetto Exchanges into Central Battery System within next few years.

It is to be noted that at present self-dialing (STD) system is available between Jessore-Noapara and Jessore-Sarsa tele-exch-anges.

It was learnt from a competent source that the authority was busy with establishing STD links between Jessore-Kushtia, Jessore-Narail, Jessore-Magura, Jessore-Chuadanga and Jessore-Satkhira by the end of the year.

The Divisional Engineer (Telegraphs), Jessore, when contacted told this correspondent that better services were being rendered to the subscribers at present.

CSO: 5500/7194

MINISTER TELLS NATIONAL RADIOTELEVISION PLANS

Madras THE HINDU in English 10 Aug 83 p 6

[Text] NEW DELHI, Aug. 9.

A 1000 KW medium-wave transmitter for a "dedicated national channel" is to be commissioned during 1985-86 and it would broadcast programmes for 18 hours a day, the Lok Sabha was informed today.

The Deputy Information and Broadcasting Minister, Mr. Mallikarjan, gave this reply when asked if the Government proposed to introduce a separate channel on Akashvani for promotion of national integration.

The coverage by AIR in some parts of the North-east region was not satisfactory and to improve it four new radio stations are proposed to be set up and two upgraded in the region during the current Plan period. The four places, where new stations were being set up at Itanagar (Arunachal Pradesh), Shillong (Meghalaya), Tura (Meghalaya) and Diphu (Assam). The transmitters of the two stations to be upgraded were Dibrugarh (to 300 KW) and Guwahati (to 50 KW).

The Chief Ministers and other Ministers in the States were welcome to broadcast and telecast over AIR and Doordarshan subject to the provisions of the AIR code.

A change in the timings of the national programme on Doordarshan was under consideration. This may affect the timings of other programmes, including feature films. The Government has not received any proposal to produce a film on the life of Tipu Sultan, the Minister said.

There was no proposal to revise the guidelines for television newscast. The guidelines had been laid down by the Government to ensure accuracy, objectivity, impartiality and balanced representation to the activities of all parties, groups as well as events, Mr. H. K. L. Bhagat, Information and Broadcasting Minister told the House.—PTI, UNI.

CSO: 5500/7189

SPACE OFFICIAL GIVES DETAILS ON INSAT-1B

Bombay THE TIMES OF INDIA in English 17 Aug 83 p 14

[Text] HASSAN, August 16 (PTI).

INDIA'S second domestic multi-purpose operational satellite INSAT-1B has been put inside the cargo bay of the American space shuttle 'Challenger', scheduled for blast off at 11.51 a.m. I.S.T. on August 30.

The master control facility (MCF) specially set up to command the 1193 kg satellite is in "full operational readiness for the launch," Prof. Satish Dhawan, chairman of the space commission, told a party of visiting newsmen.

The MCF had telemetered the signals of the INSAT-1B from inside the cargo bay of 'Challenger' and everything was going on according to schedule, he said.

All deficiencies experienced in the INSAT-1A had been corrected and the INSAT-1B had undergone extensive thermo-vacuum and acoustic tests, Prof. Dhawan said and added, "the launching of this satellite will be the first major step towards domestic operational use of space in the country."

GEO-STATIONARY ORBIT

In INSAT-1B satellite, originally meant to be an on-orbit spare satellite with certain major path telecommunication utilisation, will now replace INSAT-1A at 74 degree east longitude 36,000 km. over the equator. In the geo-stationary orbit, the satellite will match earth's 24-hour rotational period and thus remain stationary over a fixed point on the globe.

Though the satellite is functionally identical to INSAT-1A, it incorporates a number of minor changes. It is being launched by the space shuttle, a manned reusable launcher, instead of an expendable delat 3910 launch vehicle used for INSAT-1A.

Prof. Dhawan said the basic design of INSAT-1B was sound and expressed his confidence that it would do well.

LOWER COST

Asked why the space department chose to launch the satellite through the space shuttle instead of a rocket, Prof. Dhawan said the former would reduce the cost by about $15 million.

Defending the role of INSAT-1B as a multipurpose satellite system, Prof. Dhawan said if separate satellites were to be launched for different roles INSAT played, it would have cost 3 to 4 times more.

Prof. Dhawan said the education ministry was working out plans to utilise INSAT-1B for educating masses in the rural areas.

He said work on the third operational multi-purpose satellite, INSAT-JC, had begun, incorporating a few additional changes. The launch reservation has been made and the satellite is expected to be put in orbit in the second half of the 1986 by the U.S. space transportation system.

With this, the INSAT-1 space segment will achieve its full complement of two operating satellites, one primary and the other on-orbit spare with some major path telecommunication utilisation.

COMMUNICATION CHANNELS

The INSAT master control facility here has established three round-the-clock communication channels with the Kennedy space centre.

While two channels have been established through Bombay and New Delhi via INTELSAT satellite, the third one will be through the submarine cable via Madras.

Space scientists, Mr. Promod P. Kale, INSAT project director, Prof. J. P. Singh, programme director, and Mr. K. P. M. Bhat, manager, INSAT mission operation and incharge of the MCF, said 30 engineers and space scientists from the Ford Aero Space Corporation, the builders of the satellite, would be present at the centre during launch. Six of them would stay at the control facility for two months.

They said during the INSAT-1B orbit raising activities, the INSAT MCF would be supported by remote tracking station services from Andover (USA) and Carnarvon (Australia).

Prof. J. P. Singh said the INSAT-1B contained 12 transponders for telecommunications, two high-power transponders for TV broadcasting and radio networking, besides equipment for meteorological observation. The solar array which provides 1185 Watt power to the spacecraft was expected to provide 900 Watts at the end of its seven-year life.

WEATHER IMAGES

On the telecommunication utilisation, Prof. Singh said 30 fixed stations, 28 of the P and T and two of the Oil and Natural Gas Commission, were ready for operation with the INSAT-1B satellite. These were currenly operating with two transponders leased from INTELSAT.

In the first year of INSAT-1B operation, some 1,600 two-way long-distance circuits were to be pressed into use. In the second year, an additional 1,900 and the remaining, about 500, in the third year.

The INSAT-1B meteorological equipment would provide round-the-clock half-hourly synoptic images of weather systems, including severe weather, cyclones, sea surface and cloud top temperature, water bodies, snow over the entire country as well as adjoining land and sea areas. It would also collect and transmit meteorological, hydrological and oceanographic data from unattended remote platforms and give timely warnings of impending disasters from cyclones, floods and storms.

The very high resolution radio meter on board INSAT-1B would help in taking pictures of earth's cloudcover over India after a month of its operation.

RADIO NETWORK

In respect of radio and television network, INSAT-1B would help in linking All India Radio studios in Delhi with Bombay, Calcutta and

Madras. In addition, special event of national and regional coverages from remote locations would be possible through an "augmented transportable earth state."

The AIR plans to deploy 94 five-channel radio networking terminal and the deployment of these terminals was expected to be completed by mid-1984. At the time of INSAT-1B operationalisation, about 30 radio networking terminal would be ready for operation.

The INSAT-1B TV segment would provide two nationwide TV broadcast channels for direct satellite to "augmented community TV receivers" in those rural parts of the country where direct satellite TV coverage has been deemed to be more cost-effective National and regional networking of terrestrial transmitters was also possible.

The special plan for TV expansion, approved in July, involved the implementation of additional 13 high-power and 112 low-power TV transmitters with programmes fed through one of the two high-power INSAT-1B S-band channels before the end of 1984.

Once INSAT-1B is made operational, all 28 TV transmitters in the country using satellit TV feed will switch over to INSAT-1B from the C-band equipment operating with a transponder leased from the Soviet Union on board their Stationar-6 satellite and TV uplinks from ISRO earth station in Delhi.

CSO: 5500/7193

BRIEFS

MICROWAVE NETWORK TO BE BUILT--Maseru, 29 Aug, SAPA--A large Japanese consortium has been awarded a R9-million contract to build a microwave system for Lesotho's telecommunications network. Radio Lesotho announced today that the microwave system was aimed at improving Lesotho's telecommunications system. The introduction of the microwave system would also enable it to carry television signals. It will cover a distance of 500 km and will have 25 transmission towers. The construction of the microwave system will be financed with a loan from the African Development Bank, payable over 17 years at 7 percent interest. It is expected to be completed in 1985. [Text] [MB301122 Johannesburg SAPA in English 0800 GMT 29 Aug 83]

CSO: 5500/199

SATELLITE EARTH STATION IN OPERATION

MB290553 Mbabane THE TIMES OF SWAZILAND 29 Aug 83 p 3

[By Mashumi Twala]

[Text] Swaziland now has a direct telecommunications connection with the rest of the world.

This follows the official commissioning of the new Satellite Earth Station at the Ezulwini Valley recently.

The kingdon will now be able to communicate with the world without being monitored by South Africa as has been the case up to now.

A statement by the department of posts and telecommunications said the new station is also equipped for transmission and reception of the live international television programmes.

The statement said such facility will be available when requested by the Swaziland Television Broadcasting Corporation on an advance booking basis because arrangements have to be made on costs with each country that will transmit the live coverage and the International Telecommunicaitons Satellite Organization in Washington.

"Intelsat, as the organisation is called, is the body based in Washington, D.C. that takes care of the planning, maintenance and operation of the satellite network on a global basis," said the statement.

The statement said the site of the station was made available at no cost to the department by the community.

The director of posts and telecommunications, Mr John Sikhondze said the choice of the valley was guided by; "The capability to be able to operate at least in two regions namely the Atlantic and Indian Ocean regions, freedom from any sources of radio interferences, proximity to infrastructure such as roads and commercial power and the ease of connection to the existing national telephone network."

The statement said functional testing of the station was carried out from end of May 1983 up to the end of June.

"These tests involve the verification that the station indeed meets the mandatory requirements as laid down by the Intelstat.

"Upon completion of functional testing Intelstat granted Swaziland provisional acceptance on 7 July 1983. Formally acceptance is being sought now as final report of the test data has compiled and submitted to Intelstat.

Swaziland Earth Station operates into two gateways namely United Kingdom and the United States of America.

The choice of these was primarily dictated by Swaziland telephone and telex traffic. Upon completion of all bilateral arrangements the United Kingdom voice circuits were activated and by 20 July most traffic to the UK was routed via the Earth Station.

"The USA circuits were activated on 3 August and by 8 August all traffic to the USA was routed via the earth station.

Swaziland is not therefore able to transmit these two countries for telephone and telex traffic destined to other countries throughout the world.

CSO: 5500/200

DESTABILIZATION MAY SPEED UP TELE-LINKS

Harare THE HERALD in English 26 Jul 83 p 1

[Text]

Herald Reporter

SOUTH AFRICAN aggression might force Zimbabwe to speed up plans for an independent telecommunications network by 1985.

This likelihood was revealed by the Minister of Information, Posts and Telecommunications, Dr Nathan Shamuyarira, when he opened the 17th annual regional telecommunications conference in Harare yesterday.

He told delegates from Botswana, Tanzania, Ethiopia, Zambia, Kenya, Lesotho, Malawi, Mozambique, Swaziland and the Seychelles, as well as from several international organisations, that Zimbabwe was now heavily dependent on South Africa for its links.

"Many of you who are here and would like to make calls home will have to have them put through South Africa."

The main aim of the re-equipment programme and the construction of the earth station in Gweru was to link the country with satellite communications. The station was expected to be completed by December next year, while the link-up with the rest of the world would take place in January 1985.

Dr Shamuyarira said the programme included an international exchange that would facilitate direct dialling to the rest of the world.

"We are also modernising manual equipment in local telephone exchanges in order to improve the capacity and quality of our internal system."

The minister said the telephone link between Zimbabwe and Zambia was expected to be completed by the end of the year and another with Botswana was due to begin operating a few months later.

These new links would also provide Zimbabwe with links with Mozambique, Swaziland, Lesotho and the pan-African telecommunications network, connecting it to other African capitals and beyond.

"The success of the Lagos plan to increase inter-African trade can only be achieved if it is backed by an effective and efficient telecommunications network."

Most countries in the region, he said, suffered from the problem of lack of trained personnel and expertise in various fields of telecommunications.

"In Zimbabwe we have embarked on a programme of recruiting engineers from Third World countries. We intend to meet the manpower gap by utilising some of the expertise that other African countries have developed over the years. At the same time we have taken steps to double the capacity of our training institutions."

CSO: 3400/1793

LUXEMBOURG MAY PARTICIPATE IN ARIANE SATELLITE VENTURE

Paris LE NOUVEL ECONOMISTE in French 1 Aug 83 p 33

[Text] Ariane, finally "fit for service," is going to be having a busy time of it. Among its customers over the next two years, the sponsors of three French high-performance satellites: Telecom 1, Spot (for observation of the Earth) and TDF 1, direct television satellite manufactured in cooperation with Germany.

The implementation of the three major programs is making progress. Thomson-CSF has just turned over the first Telecom 1's useful load to Matra, responsible for the finishing touches to the satellite on behalf of the Directorate General of Telecommunications. For its part, Matra has started "integation" in the vast white hall in Toulouse. Cost of the program, ground stations and launchings included: about 1.2 billion francs.

Cost. The Spot satellite is taking shape in the same temple of modern times at Toulouse with Matra also in charge. The Spot program represents an outlay in the neighborhood of 215 million francs. On the other hand it will be at Cannes, in one of Aerospatiale's white halls, where the direct television satellite TDF 1 will be assembled, implementation of which has been entrusted to the Eurosatellite group (Aerospatiale and Messerschnidt-Bolkow-Blohm, Thomson-CSF et AEG-Telefunken, with participation by the Belgian firm Etca). Cost of this program is estimated at 1.3 billion francs.

What will these satellites, to be launched in the next two years, be used for? Telecom 1 is being anxiously awaited by both civilians and military.

In fact, it is going to handle a triple mission: telecommunications with the departments and overseas territories, military communications with forces stationed overseas and "Royale" units, and lastly interfirm communications in the Hexagone: transfer of data between computers, videoconferences and videotransmissions.

A thousand or so firms will be affected. They are already aware of what it will cost them: an annual user fee of 100,000 francs for one or two sites; an annual subscription of 150,000 francs for private access and 60,000 francs for shared access; a charge for communications changing according to the schedule.

With Spot "France will join the space travelers' club." Charged with researching and maintaining surveillance over land, sea and earth atmosphere, Spot will complement the American satellites Landsat 3 and 4, but with increased resolving power (its maps will be sharper).

The commercial impact of Spot should be significant. "The pictures have an unquestionable appeal, and we expect to sell 60,000 to 100,000 a year," it was stated at Spot-Image, a commercial law firm set up a year ago, with stockholders including the National Center for Space Studies, the National Geographic Institute (IGN), the Bureau of Geological and Mining Explorarion (BRGM), the French Petroleum Institute (IFP), Matra and the European Propulsion Company (SEP), Belgian and French banks, as well as the Swedish Space Corporation. Sot-Image has also opened a branch in the United States, in Washington.

If Telecom 1 and Spot seem "well along," we are still wondering about the utilization of TDF 1. Its platform will consist of three repeaters. Two will be used to broadcast TF 1 and Antenne 2 programs, as a backup for ground networks,by ensuring complete coverage by Hexagone.

Utilization. Utilization of the third channel remains uncertain. Exploitation of this third channel could be assigned to the Luxembourg Television Broadcasting Company (CLT) in association with other partners, undoubtedly including the French Sofirad. Tow official delegations have been formed to discuss this possibility. In France as in Germany the governments seem anxious in any case to find a solution quickly.

The reasons for the participation contemplated for CLT? Quite simply, that firm has foreseen the possibility of having its own television satellite available. A satellite which would cover a broad part of France and Germany. In other words it would compete with TDF 1. According to the experts, such competition would be ruinous.

With Telecom 1, Spot and TDF 1, the French space industry is on the eve of decisive commitments. We must reflect on what comes next: this will be done in the fall at a closed cabinet meeting.

9436
CSO: 5500/2769

DENMARK STARTS VIDEO TELECONFERENCE TESTS; UK, FRG TO JOIN NET

Copenhagen BERLINGSKE TIDENDE in Danish 11 Aug 83 p 12

[Text] In the past, meetings have been held by using telephones to save time and travel expenses. Now, however, the participants also will be able to see one another. Beginning on 15 August the Postal and Telegraph Service (P&T) will begin a 3-year video teleconference test, designed primarily for leaders in the private and public sectors.

Five hotels in Copenhagen, Arhus, Aalborg, Vejle, and Nyborg as well as three video firms are involved in the project. The hotels are setting up video teleconference centers that will be linked by the P&T radio network, so that it will be possible to remain in Copenhagen, for example, and hold a meeting with people in, for example, Aalborg.

A video conference will cost 3,000 kroner for the first hour and 1,000 kroner for each additional half hour.

As in all areas of communications electronics, this is merely the first of a multitude of possibilities.

Thus, chief superintendent Bernhard Bliksby of the Telecommunications Board's marketing section said that beginning in 1986 it will be possible to conduct video teleconferences between various countries throughout the world.

"This is possible even today, but it is too expensive. Beginning in 1986, however, it may be economically feasible, thanks to the joint European satellite that will be put into operation that year," Bernhard Bliksby said.

The current plans of the Telecommunications Board are to expand the scope of the video teleconferences to include all of Scandinavia beginning next year. It is expected that Great Britain or West Germany will be included later next year.

9336
CSO: 5500/2762

BRIEFS

ADVANCE SATELLITE-TELEVISION RECEIVER--Alborg University Center has developed, in its own words, the best satellite-television receiver in the world. It took 3 years to develop the receiver and its sensitivity to TV signals is such that only a small parabolic antenna is needed to receive satellite television. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 8 Jul 83 p 2] 9336

JOINT NORDIC TELEFAX TRIALS START--The postal service [of Denmark] has made such strides in its testing of telefax, the electronic transmission of messages on paper from one post office to another, that agreement has been reached with the other Nordic postal services to include all the Scandinavian countries in the tests. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 26 Jul 83 p 2] 9336

CSO: 5500/2762

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